

Title (en)

Measuring gas components together with a paramagnetic gas

Title (de)

Messung von Gaskomponenten gemeinsam mit einem paramagnetischen Gas

Title (fr)

Mesure de composants gazeux avec un gaz paramagnétique

Publication

EP 1840563 A1 20071003 (EN)

Application

EP 06111897 A 20060329

Priority

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Abstract (en)

The invention concerns a gas analyzer, which comprises: an electromagnet (5) that has an air gap (16); a power source (60) for supplying cyclically variable electrical current/voltage to said electromagnet; a sample gas conduit (1) and a reference gas conduit (2) opening into said air gap; an exit conduit (18, 19) communicating with said air gap for removing the intermixed sample and reference gases; pressure detecting microphone or microphones (3, 4) connected to said sample gas conduit (1) and to said reference gas conduit (2) for sensing gas pressures at a first acoustic measuring frequency (f_{A1}) in the respective conduits for giving at least one acoustic pressure signal component (S 1 and/or S2); and electronics (29) connected to said microphone(s) to receive said acoustic pressure signal component or components to form at least a first intermediate output signal (SI A1) describing content of a paramagnetic gas component in the sample gas. Further in the gas analyzer: said pressure detecting microphone(s) are adapted for sensing gas pressures at a second acoustic measuring frequency (f_{A2}), and giving at least a second acoustic pressure signal component (S3 and/or S4); and said electronics receive said second acoustic pressure signal component or components to form a second intermediate output signal (SI A2) including content data of a second gas component in the sample gas.

IPC 8 full level

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CPC (source: EP US)

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DOCDB simple family (application)

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